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## REMARKS

An Excess Claim Fee Payment Letter is submitted herewith to cover the cost of four excess total claims.

Claims 1-11 and 26-42 are all the claims presently pending in the application. Claims 7-11, 36 and 40 have been withdrawn. Claims 1, 7, 26, 36 and 37 have been amended to more particularly define the claimed invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1, 2, 4, 33, 35, 38, 39 and 41 stand rejected under 35 U. S. C. §102(b) as allegedly unpatentable over Juestel et al. (JP Pub. 2002-223008). Claims 37 and 42 stand rejected under 35 U. S. C. §102(b) as allegedly unpatentable over Lowery (U. S. Patent No. 5,959,316). Claims 3, 5 and 6 stand rejected under 35 U. S. C. §103(a) as allegedly unpatentable over Juestel in view of Roberts et al. (U. S. Patent No. 6,335,548).

Claim 26 stands rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Juestel in view of Lowery. Claims 27-32 stand rejected under 35 U.S. C. §103(a) as allegedly unpatentable over Juestel in view of Chen (U. S. Patent No. 6,531,328). Claim 34 stands rejected under 35 U. S. C. §103(a) as allegedly unpatentable over Juestel in view of Keller (U. S. Patent Pub. No. 1004/0012027).

These rejections are respectfully traversed in view of the following discussion.

#### EXEMPLARY ASPECT OF THE CLAIMED INVENTION 1.

An exemplary aspect of the claimed invention (e.g., as recited, for example, in claim 1) is directed to a light emitting apparatus which includes a semiconductor light emitting element that is mounted on an electrode and emits light with a predetermined wavelength, a pre-molded light-transmitting portion that includes a recess to house the

semiconductor light emitting element, the pre-molded light-transmitting portion including a light-transmitting material and being affixed to the electrode by a sealant formed on the light emitting element (Application at page 13, lines 24-29), and a phosphor layer portion that is formed on a surface of the recess, the phosphor layer portion including a phosphor to be excited by irradiating light emitted from the semiconductor light emitting element.

A conventional apparatus (e.g., see Application at Figure 4A) may include a light emitting diode (LED) 60 integrally formed with light source 62, and a lens element 72. However, since in such an apparatus the light source 62 and lens element 72 are positioned using posts 70, 71 and recesses 62A, 62B (Application at Figure 4B), it is difficult to adjust the positioning precision of the light source 62 and lens element 72. (Application at page 5, lines 1-5).

The claimed invention, on the other hand, includes a pre-molded light-transmitting portion that includes a recess to house the semiconductor light emitting element, the pre-molded light-transmitting portion including a light-transmitting material and being affixed to the electrode by a sealant formed on the light emitting element (Application at page 13, lines 24-29). This may help to precisely position the light emitting element with respect to the phosphor layer portion that is formed on the surface of the recess (Application at page 15, lines 4-11).

# II. THE RESTRICTION REQUIREMENT

The Examiner has withdrawn claims 7-11, 36 and 40 as allegedly directed to a non-elected invention. This is nonsense.

Indeed, the Examiner in an Office Action dated October 26, 2005 required Applicant to elect an invention from among four groups including Group I which the Examiner identified as including claims 1-11, stating on page 2 that "the different inventions include the specifics of a semiconductor light device including a phosphor layer (Invention I) ..." (emphasis added). Applicant elected Group I and the Examiner EXAMINED claims 7-11 and rejected these claims in three separate Office Actions dated January 31, 2006, July 20, 2006, January 17, 2007.

The Examiner now complains that Applicant amended claim 7 in the Amendment filed on April 17, 2007 to include the term "pre-molded light-transmitting portion" and it would be a "scrious burden" for the Examiner to now examine claims 7-11. This is completely unreasonable.

Applicant would point out that specification clearly describes the light-transmitting portion as being "pre-molded". Applicant would remind the Examiner that the claims should be construed in light of the specification. Therefore, assuming that the Examiner properly construed claims 7-11 in light of the specification in preparing the Office Actions dated January 31, 2006, July 20, 2006, January 17, 2007, there clearly could be no serious burden on the Examiner in examining these claims <u>FOR A FOURTH TIME</u>.

Applicant has spent a considerable amount of time and money prosecuting claims 7-11 of the present Application. Applicant respectfully requests that the Examiner properly examine these claims as required by the MPEP.

In view of the foregoing, the Examiner is respectfully requested to withdraw the restriction requirement.

# III. THE ALLEGED PRIOR ART REFERENCES

## A. Juestel

The Examiner alleges that Juestel teaches the invention of claims 1, 2, 4, 33, 35 and 38. Applicant would submit, however, that there are features of the claimed invention that are not taught or suggested by Juestel.

Juestel discloses a light emitting element which is intended to have an improved lifetime. The light emitting element includes a light emitting diode (LED) 3 and a fluorescence layer 2 having a water-resistant coating (Juestel at Abstract).

However, Applicant would submit that Juestel does not teach or suggest "a pre-molded light-transmitting portion that includes a recess to house the semiconductor light emitting element, the pre-molded light-transmitting portion comprising a light-transmitting material and being affixed to said electrode by a scalant formed on said light emitting element", as recited in claim 1(Application at page 13, lines 24-29). As

noted above, in an exemplary aspect of the claimed invention, this feature may help to precisely position the light emitting element with respect to the phosphor layer portion that is formed on the surface of the recess (Application at page 15, lines 4-11).

Clearly, Juestel does not teach or suggest this novel feature. In fact, the Examiner basically concedes on page 7 of the Office Action that Juestel does not teach or suggest this feature.

Indeed, Applicant would again point out that Juestel simply teaches forming the housing 6 using a conventional method of depositing a liquid epoxy on the LED 3 and curing the liquid epoxy to form the housing 6. However, this provides a completely different result from the claimed invention in which the semiconductor light emitting element is inserted into the recess to house the semiconductor light emitting element.

Further, even assuming (arguendo) that Jucstel includes a phosphor layer that is, at the beginning of the formation process thereof, formed uniform on the light emitting element (not on the surface of the recess of the light-transmitting portion), the phosphor layer material is fluid and will flow downward by gravity even during the formation process. This causes unevenness in the thickness of the phosphor layer.

Therefore, Juestel clearly does not teach or suggest a pre-molded lighttransmitting portion that includes a recess to house the semiconductor light emitting element, the pre-molded light-transmitting portion including a light-transmitting material and being affixed to an electrode by a scalant formed on the light emitting clement.

Therefore, Applicant would submit that there are features of the claimed invention that are not taught or suggested by Juestel. Therefore, the Examiner is respectfully requested to withdraw this rejection.

#### B. Lowery

The Examiner alleges that Lowery teaches the invention of claims 37 and 42, and that Lowery would have been combined with Juestel to form the invention of claim 26. Applicant would submit, however, that these references would not have been combined and even if combined, the alleged combination would not teach or suggest

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each and every element of the claimed invention.

Lowery discloses a device including an LED 18, a transparent spacer 50 deposited on the LED 18 and cured (Lowery at col. 3, lines 7-9), a fluorescent material 52 deposited on the spacer 50 and cured, and the "entire assembly is embedded in a transparent encapsulation epoxy resin 26 (Lowery at Figure 1).

However, Applicant respectfully submits that Juestel and Lowery are unrelated. Indeed, Juestel is intended to waterproof a fluorescence layer in a light emitting element, whereas Lowery is intended to provide more uniform lighting by using a transparent spacer. No person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the references provide no motivation or suggestion to urge the combination as alleged by the Examiner. Indeed, these references clearly do not teach or suggest their combination. Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

Moreover, Applicant would submit that neither Justel, nor Lowery, nor any alleged combination thereof teaches or suggests "a pre-molded light-transmitting portion that includes a recess to house the semiconductor light emitting element, the pre-molded light-transmitting portion comprising a light-transmitting material and being affixed to said electrode by a scalant formed on said light emitting element", as recited in claim 1(Application at page 13, lines 24-29). As noted above, in an exemplary aspect of the claimed invention, this feature may help to precisely position the light emitting element with respect to the phosphor layer portion that is formed on the surface of the recess (Application at page 15, lines 4-11).

Clearly, this feature is not taught or suggested by Lowery.

Indeed, the Examiner surprisingly attempts to equate the transparent spacer 64 with the sealant of the claimed invention. This is clearly unreasonable.

In fact, Applicant would refer the Examiner to Figure 4 in Lowery, and point out that the transparent spacer 64 is deposited as a liquid over the LED 18 and cured, and

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then the fluorescent material 66 is formed on the cured spacer 64, then the final encapsulation 68 is deposited as a liquid onto the cured fluorescent material 66 (Lowery at col. 3, lines 18-33).

That is, clearly the cured spacer 64 in Lowery has nothing to do with fixing the final encapsulation 68 to an electrode. Therefore, Lowery clearly does not teach or suggest a pre-molded light-transmitting portion that includes a recess to house the semiconductor light emitting element, the pre-molded light-transmitting portion including a light-transmitting material and being affixed to the electrode by a sealant formed on the light emitting element. Therefore, Lowery clearly does not make up for the deficiencies in Juestel.

Therefore, Applicant would submit that these references would not have been combined and even if combined, the combination would not teach or suggest each and every feature of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

#### Roberts, Chen and Keller C.

The Examiner alleges that Juestel would have been combined with Roberts to form the claimed invention of claims 3, 5 and 6, that Juestel would have been combined with Chen to form the invention of claims 27-32, and that Juestel would have been combined with Keller to form the invention of claim 34. Applicant would submit, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every feature of the claimed invention.

Roberts is directed to a semiconductor radiator emitter package, in which a radiation emitter 202 (e.g., LED chip) is mounted on lead frame 201 (Roberts at col. 26, lines 18-29).

Chen discloses a packaging substrate including a packaging material 8, an LED chip 3 and an encapsulating resin 5 (Chen at Figure 14; col. 5, lines 1-45).

Keller discloses a solid state emitter package and a phosphor including ceriumdoped yttrium aluminum gamet (Cc:YAG) (Keller at [0008]).

However, Applicant respectfully submits that these references are unrelated.

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Indeed, in contrast to Juestel, Roberts is directed to a radiation emitter package, Chen is intended to improve performance by using a silicon wafer as a packaging substrate, and Keller is intended to improve an emitter package by using a conversion material which absorbs substantially all of the light emitted from an emitter. No person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the references provide no motivation or suggestion to urge the combination as alleged by the Examiner. Indeed, these references clearly do not teach or suggest their combination. Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

Moreover, Applicant would submit that neither Juestel, nor Roberts, nor Chen, nor Keller, nor any alleged combination thereof teaches or suggests "a pre-molded lighttransmitting portion that includes a recess to house the semiconductor light emitting element, the pre-molded light-transmitting portion comprising a light-transmitting material and being affixed to said electrode by a sealant formed on said light emitting element", as recited in claim 1 (Application at page 13, lines 24-29). As noted above, in an exemplary aspect of the claimed invention, this feature may help to precisely position the light emitting element with respect to the phosphor layer portion that is formed on the surface of the recess (Application at page 15, lines 4-11).

Clearly, Roberts does not teach or suggest this novel feature. Indeed, the Examiner again attempts to rely on Figure 19 and columns 20 and 29-30 to support his position. However, Applicant would again point out that Roberts does not teach or suggest a light-transmitting portion (e.g., a lens) that is pre-molded. Instead, Roberts teaches an encapsulant that that is molded over leads and cured (e.g., see Roberts at Figure 11):

That is, nowhere does Roberts teach or suggest a sealant that affixes a lighttransmitting portion to an electrode. Therefore, Roberts clearly does not teach or suggest a pre-molded light-transmitting portion that includes a recess to house the

semiconductor light emitting element, the pre-molded light-transmitting portion including a light-transmitting material and being affixed to the electrode by a sealant formed on the light emitting element. Therefore, Roberts clearly does not make up for the deficiencies of Juestel.

Likewise, this feature is clearly not taught or suggested by Chen. Indeed, the Examiner attempts to equate the LED chip 3 in Chen with the light emitting element of the claimed invention. Again, this is clearly unreasonable.

In fact, like Roberts, nowhere does Chen teach or suggest a sealant that affixes a light-transmitting portion to an electrode. Therefore, Chen clearly does not teach or suggest a pre-molded light-transmitting portion that includes a recess to house the semiconductor light emitting element, the pre-molded light-transmitting portion including a light-transmitting material and being affixed to the electrode by a sealant formed on the light emitting element. Therefore, Chen clearly does not make up for the deficiencies of Juestel.

Likewise, Keller does not teach or suggest a light-transmitting portion (e.g., a lens) that is pre-molded. Indeed, Keller simply discloses that a protective epoxy layer is filled into the cup 18 of the package 10 such that the LED 12 is covered, and then the epoxy is cured (Keller at [0033]).

That is, like Roberts and Chen, nowhere does Keller teach or suggest a sealant that affixes a light-transmitting portion to an electrode. Therefore, Keller clearly does not teach or suggest a pre-molded light-transmitting portion that includes a recess to house the semiconductor light emitting element, the pre-molded light-transmitting portion including a light-transmitting material and being affixed to the electrode by a sealant formed on the light emitting element. Therefore, Keller clearly does not make up for the deficiencies of Juestel.

Therefore, Applicant would submit that these references would not have been combined and even if combined, the combination would not teach or suggest each and every feature of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

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## FORMAL MATTERS AND CONCLUSION IV.

Applicant notes that the title has been amended to address the Examiner's concerns.

In view of the foregoing, Applicant submits that claims 1-11 and 26-42, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Date: 9/28/07

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Respectfully Submitted,

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the foregoing Amendment was filed by facsimile with the United States Patent and Trademark Office, Examiner Andrew Owens Arena Group Art Unit # 2811 at fax number (571) 273-8300 this ZgHa day of

2007.

Phillip E. Miller Reg. No. 46,060